



AMA GOLD LEADER CLUB

RC Propbusters of Salem CT

www.rcpropbusters.com

AMA Club No 191
Founded 1937

Jim Holzworth, Newsletter Editor
jimholzworth@gmail.com, 860-885-9260
RC Propbusters, Inc. ©

July 2025 Newsletter

Newsletter hiatus: No August Newsletter – The next issue will be combined August/September.
August meeting at 7:30 at Flying Field (rain backup at Salem Center School) with Zoom.
General Reminders for all RC Propbusters. See page 3.
Take The Recreational UAS Safety Test (TRUST), required by FAA. See page 7.
Neighborhood Fun Fly (August 2nd, Rain Date 8/3). See page 8.
Family Fun Fly and Potluck (September 6th, Rain Date 9/7). See page 9.



Event Director (CD) Steve Pickering welcomes and addresses pilots at the 2025 Electric Fun Fly & Swap Meet. See pages 14-17.

RC Propbusters meetings are held on the third Tuesday of every month @ **7:30 PM**. Meeting location is the historic Salem Center School at 250 Hartford Road (Route 85), about one mile north of Salem Four Corners (Circle).

Learn to Fly!

If you have an interest, come to our field. There is usually a member there who will give you the opportunity to try flying a trainer type model either powered by an electric motor or fueled engine. The gentlemen listed below have generously offered to help you learn to fly r/c airplanes, helicopters, drones, and gliders.

INSTRUCTORS

TOM VERNON	CHIEF PILOT	JOE COMEROSKI	HELICOPTERS
DENNIS DUPLICE	FIXED WING	ED DEMING	BOTH
ROBERT LARSON	BOTH	LEN BUFFINTON	* GLIDERS
DAVE GRAINGER	FPV RACING	RICHARD CROOKS	FIXED WING
DAVE PRATT	FIXED WING	STEVE CHRISTLEY	FIXED WING
RAY GILBERT	BOTH	STEVE PICKERING	FIXED WING

* Len Buffinton is a Glider and Aerotow expert who can also help you with fixed wing flying.

If you are a student, hook up with one of these members and get trained.

R/C Propbusters, LLC. Officers for 2025

President:	Ed Deming
Vice President:	Steve Pickering
Treasurer:	John Banks
Secretary:	Bill Fries
Asst. Secretary:	John Greenwood
Safety officer:	Tom Vernon
Newsletter Editor:	Jim Holzworth
Field Marshal:	Shane Duffy
Asst. Field Marshal:	Ray Gilbert
Board of Directors:	Mike DeFranzo, Mike Likar, Mike Carabillo, and Peter Nosal

CHECK OUT OUR WEBSITE:

<http://rcprobusters.com/>

Please submit ideas and tips for the newsletter to Jim Holzworth at

jimholzworth@gmail.com

Propbusters Meeting Location

Regularly scheduled Propbusters monthly meetings are held at the Salem *Center School*, 250 Hartford Rd Salem, CT 06420. The *Center School* is in the Salem CT historic district.

<https://historicbuildingsct.com/center-school-salem-1885/>
41.491289, -72.275949



Monthly meetings will simultaneously be conducted electronically using Zoom.

General Reminders for all RC Propbusters

PLEASE CHECK OUR WEBSITE (<https://rcpropbusters.com>) REGULARLY, particularly the NEWS AND ANNOUNCEMENTS section up front for current notices and information. It is updated at least weekly.

When opening and closing the flying field for the day, leave gate locked without displaying the combination.

Strict observance of FRIA application boundaries, particularly the northern tree line by Route 82. This is especially important with our new 1200' ceiling waiver.

Mark all your models with required FAA and AMA markings.

All pilots must have FAA registration cards and proof of TRUST completion at the field while flying.

Noise control efforts will still be required for when flying gassers/glow – careful observance of northern boundary and use of spotters recommended.

2025 Event Schedule

Memorial Fun Fly	June 15
Electric Fun Fly & Swap Meet	July 19
Neighborhood Fun Fly	August 2 (rain date Aug 3)
Club Fun Fly / Potluck Picnic	September 6 (rain date Sept 7)
Warbird Rally	October 4 (rain date Oct 5)

RC Propbusters Outerwear
available at



26A Bushnell Hollow Rd., Baltic, CT 06330
 Phone: 860-822-9777
 Email address: jdembroidering@aol.com
<https://www.facebook.com/JDEmbroidering/>

NOTICE (from the Editor): Do we have your correct email address?

If you are currently a member of R/C Propbusters in good-standing and can only receive the monthly newsletter from our website (<http://www.rcpropbusters.com>), maybe your email address has changed, or was incorrectly entered on our membership list. Monthly newsletters are sent individually (directly) to each club member at the email address listed on the website membership list. If you have a new email address, or need to make a correction, please log in to our website and update your profile.

COMMON SENSE, RESPECT FOR OTHER PILOTS, AND GOOD FIELD ETIQUETTE ALL GO A LONG WAY TOWARDS MINIMIZING REQUIRED RULES. REMEMBER: IT'S ALL ABOUT HAVING FUN WITH AVIATION MODELING IN A SAFE AND ENJOYABLE MANNER. SAFETY IS EVERYONE'S RESPONSIBILITY! IF YOU HAVE ANY QUESTIONS OR DON'T UNDERSTAND ANY OF THESE RULES, DON'T HESITATE TO ASK YOUR CLUB SAFETY OFFICER, ANY CLUB OFFICER, OR ANY EXPERIENCED PILOT FOR CLARIFICATION.

R/C Propbusters Flying Field Rules, Page 6, Updated 9.6.2023

July Aviation Events & Milestones

- 8 July 1838 (Germany) — Ferdinand Graf von Zeppelin is born in Baden, Germany. The first large-scale builder and pioneer of rigid dirigible balloons, Zeppelin made his first balloon ascent while serving as a volunteer and observer for the Union Army in America's Civil War.
- 1 July 1872 (France) — Louis Blériot, the pioneer aviator who made the world's first airplane flight across the English Channel, is born in Cambrai, France. After experimenting first with gliders, he designed and built his own monoplane with a 25-hp engine, which took him across the channel.
- 20 July 1908 (USA) — Orville Wright warns Glenn Curtiss that the wing flaps used in the AEA's "June Bug" are an infringement of the Wrights' patent.
- 5 July 1912 (USA) — Capt. Charles Chandler and Lieutenants Thomas Milling and Henry Arnold are presented with certificates qualifying them as the United States' first "Military Aviators."
- 7 July 1914 (USA) — American physics professor, Robert H. Goddard receives a patent for his two-stage solid fuel rocket.
- 1 July 1922 (USA) — Aeromarine Airways, Inc. opens flying boat passenger service between Detroit, Michigan, and Cleveland, Ohio.
- 9 July 1924 (Netherlands/France) — The first recorded flight of a live bull takes place when champion breeder "Nico V" is flown from Rotterdam, Holland to Paris, France. The bull is carried by KLM in a Fokker F.III transport aircraft.
- 1 July 1925 (USA) — The United States Air Mail Service begins overnight flights between New York and Chicago over the Allegheny Mountains.
- 2 July 1926 (USA) — The United States Army Air Corps is formed out of the former Air Services. Provisions are made for an assistant secretary of war and a five-year Air Corps expansion program.
- 12 July 1927 (USA) — End of Third National Reliability Tour for the Ford Trophy, when 13 of the 14 planes which entered the race returned to Detroit. Edward Stinson, flying a Stinson "Detroiter" with a Wright "Whirlwind" engine, is the winner.
- 1 July 1931 (USA) — The first mail delivered by rocket in the United States is claimed by three high school students from Struthers, Ohio. Led by philatelist, John Kiktavi, they send mail from Struthers to Poland, Ohio.
- 2 July 1937 (South Pacific) — Amelia Earhart and navigator Fred Noonan are lost over the South Pacific near Howland Island in a Lockheed Electra. This was to be her last long-distance attempt.
- 13-15 July 1937 (USSR) — Flying an Antonov ANT-25, powered by a AM-34 engine, Col. Mikail Gromov, Comdt. Andrei Youmachev, and Ing. Sergei Daniline set a world airline distance record of 6,295.662 miles from Moscow, USSR, to San Jacinto California .
- 11 July 1955 (USA) — First Air Force Academy class of 306 cadets sworn in.
- 13 July 1957 (USA) — President Eisenhower becomes the first United States president to fly in a helicopter when he is flown from the White House to an unnamed military post in a USAF Bell UH-13J.
- 17 July 1969 (USA) — The Apollo 11 Saturn V rocket blasts off from the Florida Space Center in route to the first moon landing.
- 20 July 1969 (Moon) — Neil Armstrong lands the lunar module "Eagle" on the surface of the moon. His immortal first words are, "that's one small step for man, one giant leap for mankind." USAF Colonel "Buzz" Aldrin joins Neil Armstrong on the surface of the moon while USAF Lt. Colonel Mike Collins remains in orbit.
- 7 July 1981 (France/England) — The first solar-powered aircraft flight across the English Channel is made by the MacCready "Solar Challenger." The 163 mile flight takes 5 hours and 23 minutes with pilot Stephen

Ptacek at the controls. The aircraft is powered by at least 16,128 solar cells on the upper surfaces of the wing and tailplane. The aircraft flew from Pontoise — Cormeilles Aerodrome, north of Paris, France to Manston Royal Air Force Base in Manston, England.

3 July 2002 – Steve Fossett completes round-the-world balloon flight, landing after 14 days, 19hrs. He broke three balloon records along the way; fastest time around the world (13 days, 3 mins), longest distance flown solo (20,483.25 mi; 32,963.35 km), and longest time flown solo (355 hrs, 50 min).

7 July 2010 – The Boeing 787 Dreamliner makes its first international appearance at the Farnborough Airshow, UK.

8 July 2011 – Launch: Space Shuttle Atlantis STS-135 at 15:29 UTC. Mission highlights: Payload Multi-Purpose Logistics Module (MPLM) Raffaello. Final flight of Atlantis, final flight of the Space Shuttle program.

<https://www.skytamer.com/July.html>

31 July 1923: Browning Machine Gun, Caliber .50, AN-M2

31 July 1923: The original patent application, Serial No. 654,955, for the legendary Browning .50-caliber machine gun was filed with the United States Patent Office on 31 July

1923. Patent Number 1,628,226 was issued to the estate of John Moses Browning by the Patent Office on 10 May 1927.



Three Browning .50-caliber machine guns and belted ammunition installed in the left wing of a Vought-Sikorsky F4U-1 Corsair, 11 August 1942. (Vought-Sikorsky)



This photograph shows SSGT Maynard H. Smith with a Browning .50-caliber machine gun at the left waist position of a B-17 Flying Fortress. (U.S. Air Force)

The majority of United States combat aircraft during World War II were armed with the Browning Machine Gun, Caliber .50, AN-M2. The machine gun could be mounted as a fixed weapon in the aircraft's wings or nose, in flexible mounts, or power-operated turrets.

The basic aircraft Browning machine gun, cal. .50, AN-M2. . . is an automatic, recoil-operated, belt-fed, air-cooled machine gun. The metallic link disintegrating belt is used in all firing of the gun. The gun is designed for all cal. .50 aircraft machine gun installations. By properly repositioning some of the component parts, ammunition may be fed into the gun from either the right or the left side.

The Browning Machine Gun ("BMG") was designed by John Moses Browning, who had also designed the Automatic Pistol, Caliber .45,

M1911, the standard sidearm of the U.S. military for 74 years; the Rifle, Caliber .30, Automatic, Browning, M1918 (best known as the “Browning Automatic Rifle” or “BAR”); the Browning Machine Gun, Caliber .30, M1919; and the Browning Hi-Power, a 9 × 19 mm double-action semiautomatic pistol designed for *Fabrique National* (FN) of Herstal, Belgium.

The AN-M2 aircraft machine gun has an overall length of 56.25 inches (1.429 meters) and weighs 61.00 pounds (27.67 kilograms). The barrel is cylindrical, and 36.00 inches (0.91 meters) long. It is surrounded by a barrel jacket with ventilation holes to dissipate heat. The bore has 8 rifled-grooves with a right-hand twist, making one complete turn in every 15.00 inches (0.381 meters).

The basic AN-M2 gun could be modified to be manually fired with the substitution of a “spade grip” back plate. It could also be changed from left-hand ammunition feed to right hand by reversing some internal parts.



Armorers load disintegrating-link belts of .50-caliber ammunition for the eight machine guns of a Republic P-47 Thunderbolt. (U.S. Air Force)



A gunner fires the two Browning .50-caliber machine guns of a B-17's ball turret. (U.S. Air Force)

The M2 machine gun had a rate of fire of 750 to 850 rounds per minute.

Ammunition is ball, armor-piercing, armor-piercing-incendiary, tracer, blank (no bullet), and dummy. The armor-piercing cartridge, M2, has a muzzle velocity of 2,840 feet per second (866 meters per second) and maximum range of 7,275 yards (6,652 meters). Some .50-caliber rounds have muzzle velocities as high as 3,450 feet per second (1,052 meters per second), though most range from 2,730 fps to 2,900 fps (832–884 m/s). The ammunition produces chamber pressures of approximately 55,000 pounds per square inch (3,792 bar).

The .50 BMG cartridge is 5.45 inches (13.843 centimeters) long (NATO 12.7 × 99). The rimless, tapered bottleneck case is 3.91 inches (9.931 centimeters) long, with diameters of 0.560 inches (14.224 millimeters) at the neck, 0.735 inches (18.669 millimeters) at the shoulder, and 0.804 inches (20.422 millimeters) at the base. The bullet is 2.31 inches (58.67 millimeters) long, with a maximum diameter of 0.510 inches (12.954 millimeters) and weighs 706.7 grains (1.6 ounces, 45.8 grams). © 2018, Bryan R. Swopes

Read all about the legendary Browning .50-caliber machine gun at: <https://www.thisdayinaviation.com/2024/07/>



Lieutenant Clark Gable with a belt of linked .50-caliber machine gun cartridges. The colored tips of the bullets identify armor piercing, incendiary or tracer ammunition.

FAA Recreational Flyer Registration

Register your RC aircraft at:

<https://faadronezone.faa.gov/#/register>

Renew your RC aircraft registration at:

<https://faadronezone.faa.gov/#/>

How much does it cost to renew a registration?

\$5 through the [FAADroneZone](#).

The Recreational UAS Safety Test (TRUST)

All Propbusters are now required to take and pass The Recreational UAS Safety Test (TRUST), ... but don't worry!



The Academy of Model Aeronautics is an FAA-approved Test Administrator of The Recreational UAS Safety Test (TRUST). TRUST is a collaboration between the FAA and industry to provide TRUST and educational safety material to Recreational Flyers.

<https://www.modelaircraft.org/trust>

The Recreational UAS Safety Test (TRUST) FAQ

June 22, 2021, UPDATED TRUST INFORMATION:

The AMA has now been approved to administer The Recreational UAS Safety Test, or TRUST. AMA has worked closely with the Federal Aviation Administration (FAA), ensuring that TRUST meets the intent of Congress without placing an undue burden on our hobby community.

Since 1936, the AMA has been dedicated to the hobby of model aviation, to educational programming, and safety in the airspace. We are offering the TRUST to the entire community of model aviation enthusiasts free of charge.

Q: What is "TRUST"?

A: "TRUST" stands for The Recreational UAS Safety Test

Q: Why do I need to take TRUST?

A: The Knowledge and Safety Test is a congressional mandate in the FAA Reauthorization Act of 2018. **All UAS users** must pass the test in order to operate a recreational model aircraft (UAS) within the National Airspace System (NAS).



www.rcpropbusters.com

Salem, CT

RC Propbusters Stuart Gadbois Memorial Field

Neighborhood Fun Fly



2025 August 2nd (3rd rain date) - 9am - 5pm
No Equipment or Experience Necessary

www.amadistrict-i.org



- Meet your local radio control club and give RC flight a try at the RC Propbusters Neighborhood Fun Fly



- Experience the joys of radio controlled flight in a safe, fun, and worry free atmosphere



- Simulator and several instructors on hand, no equipment or experience necessary

www.modelaircraft.org



- 3D and heli demo presented by our expert pilots

- Hotdogs & Burgers served



One of the best flying fields in the North-East

For details see: www.rcpropbusters.com

Academy of Model Aeronautics Chartered Club #191



- Contest Director:
Steve Pickering - pickersa@gmail.com
- Club Contact:
Ed Deming - edwardd707@aol.com

Directions



Propbusters Club Fun Fly / Potluck Picnic – Sep 6th. Fly whatever you want. Bring some food to share. Club will supply soda and water.

This is the Mayan god of corn. Behave respectfully at our flying field!



https://www.tribstar.com/news/lifestyles/a-maize-ing-history-exhibit-engages-teaches-consumers-about-corn/article_087c8048-45c7-5ed5-9e5f-3259d98ce810.html

Practice, Practice, Practice

Basics of Turns for RC Planes



RC Jim
Sep 14, 2023

RC Jim shows you how the various control surfaces are used in turns with RC planes and why each may be needed. Contents: [00:00](#) Basics of turns with RC planes [00:42](#) Initiating the turn with the ailerons [01:04](#) Forces in the turn [01:50](#) Elevator needed in turn [02:48](#) Adverse yaw [04:50](#) Coupling aileron and rudder [05:03](#) Tail dragger issues [05:44](#) Ground loop danger [06:50](#) Torque effect.



Watch this very informative video at: <https://www.youtube.com/watch?v=HrcLkUosj8s&t=39s>

The BEST Landing Procedure for a RC Airplane - Avoid Off Power Landings



RCexplained
Jan 23, 2023

RadioControlInfo (radiocontrolinfo.com) is all about bringing a different more informational perspective to the hobby world. All of this is in effort to increase the amount of success possible from someone who is new to the hobby or even someone with decades of experience.



Watch this useful video at: <https://www.youtube.com/watch?v=XFsdV9-qnzE>

The Origin of Flight--What Use is Half a Wing? | HHMI BioInteractive Video

[biointeractive](#)
Nov 11, 2015

Biologist Ken Dial's study of how young birds use their developing wings sheds light on the evolution of flight in birds. At the University of Montana's Flight Lab, Ken Dial has been researching the mechanics of bird flight. His experiments with young birds that are learning to fly provide new evidence for how flight might have evolved in a group of feathered theropod dinosaurs. Critics of evolutionary theory had asked Charles Darwin the question "what use is half a wing?" – in other words, what evolutionary advantage would a feathered limb, the precursor to a wing, provide? Dial's research suggests an answer. Download this film and find related materials and activities at HHMI BioInteractive:

<http://www.hhmi.org/biointeractive/or...>



Watch this video at: <https://www.youtube.com/watch?v=JMuzlEQz3uo> (8 min 15 sec)

How Bird Wings Work (Compared to Airplane Wings)

[SmarterEveryDay](#)
Oct 6, 2012

To learn more click here -- <http://bit.ly/DeepDiveBirds> -- To take a DEEP DIVE into how wings work! Click here to tweet DeepDive2 <http://bit.ly/TweetDeepDive2>, I hope you never look at a bird in flight the same way again. I know I won't!



Watch this video at: <https://www.youtube.com/watch?v=4jKokxPRtck> (3 min 59 sec)

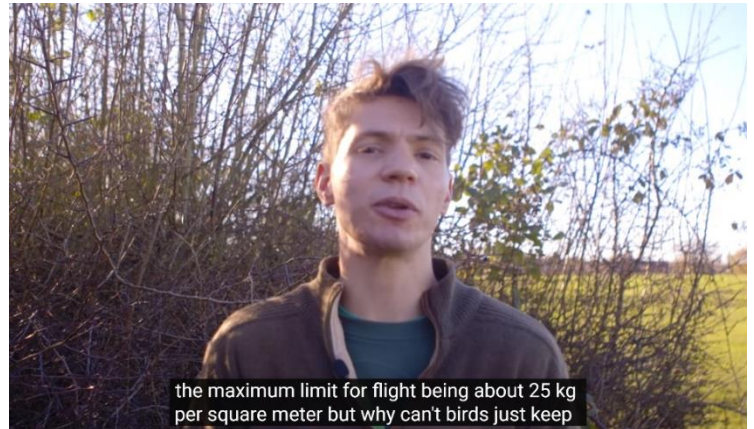
Also check out: <https://www.youtube.com/@smartereveryday>

The Science Behind Bird Flight: How Wings Defy Gravity

Mercer Falconry
Dec 7, 2024



How do wings work? Join us in this fascinating exploration of how bird wings function and how their incredible design has inspired modern technologies, including wind turbines. Feathered mechanics have shaped our understanding of aerodynamics and engineering—discover how! The intricate



role of feathers in avian flight. The basic forces at play when birds take to the skies. How the aerofoil shape contributes to flight efficiency. The importance of angles in optimizing lift. How insights from bird wings directly influence wind turbine design and performance. Understanding the mechanics of bird wings not only enhances our appreciation of nature but also drives innovation in sustainable energy solutions. By studying these biological marvels, we can create more efficient wind turbines, contributing to a greener future!

Watch this video at: <https://www.youtube.com/watch?v=BMyu2efnaF8>

Excellent article by Matteo Rovatti (with many video links and references) that explains a lot!

An unnecessarily drawn-out analysis of bird flight for animation

INTRODUCTION

In the course of evolution, we can find the development of flight in three major branches: birds, some mammals like bats, and insects. For the sake of this already quite long article we will only focus on avian flight. Bats' flapping flight can be roughly similar to birds', but insects' wings and patterns reside in a completely different category. Birds' behavior can change a lot from one species to the next. Since we cannot cover every species of bird, I've tried to keep the information here somewhat generic, with the idea that if you need a specific reference for your work you would be better prepared to investigate your specific niche independently.

I've divided the writing into three parts. We will start with understanding the anatomy of the wing that propels flight and the basics of aerodynamics that make flying a reality. From there we will be better able to understand, in part two, the different flight patterns and break down the three stages of flight: lift-off, flying, and landing. In the final part, I've covered some curiosities about wing shapes and how they influence flight patterns, why birds fly in formation, and take a separate look at hummingbirds specifically because of how particular they are. The purpose of this article is not to have a frame-by-frame breakdown but more a general understanding of how birds behave during flight. How certain species of birds have preferred

flight patterns depending on the environment, wing shapes, size, and food source. My goal is to give you an intuitive feel for how birds will act and fly about their day.

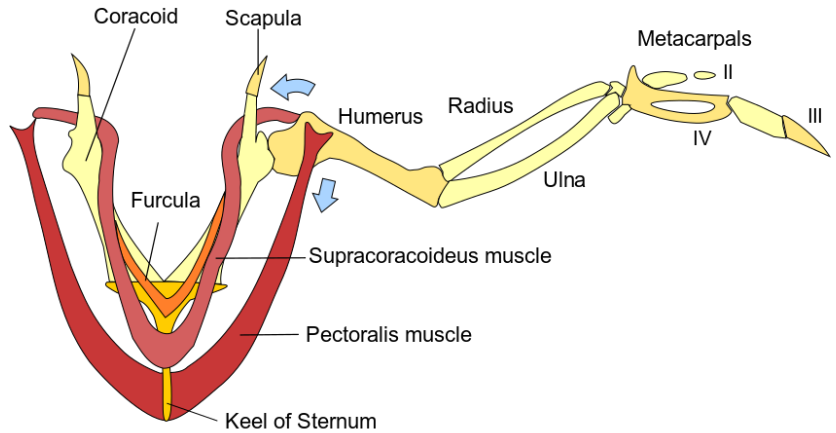
Let's start with some good old anatomy first.

- PART I - ANATOMY OF A WING

BONES AND MUSCLES

The realm of birds is vast and different and birds come in very different shapes and forms. Each species is adapted to its particular needs and lifestyles, so its anatomy can vary considerably from one to the next.

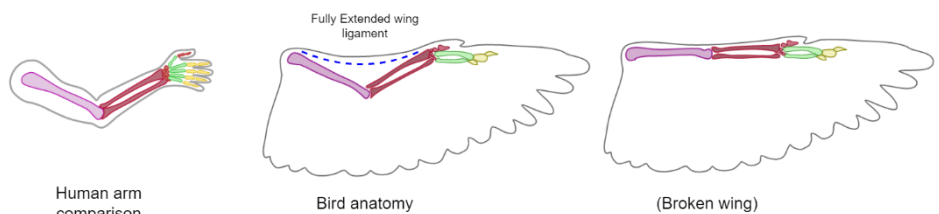
Often, when it comes to the anatomical structure of birds, most of its development revolves around the ability to be airborne. Generally, birds are trying to shave off as much weight as they can while putting most of their weight percentage into the muscles that are responsible for powering flight. Compared to human anatomy, their bones are partially hollow, which makes them lighter and with particular structural support that gives them added strength to resist the forces of lift-off, flight, and landing. Up to 25% of the bird's mass can be made up from the big pectoral muscle connecting the chest and the humerus.



Contracting this muscle will pull the wing towards the front as in the downstroke. Opposite that, we find the supracoracoideus muscles, connecting the sternum and wrapping around the top part of the humerus. Contracting this muscle will rotate the wing upwards and pull it backward, powering the upstroke.

To avoid extra weight on the wing, unnecessary bones like the ones of the hand were either eliminated or fused together. While thick connections between bones and their fusion strengthen the whole structure, the distal part of the wing bone structure becomes rather inflexible - birds can't twist their elbow joints as we do. Bird wing bones got larger with fewer points of rotation.

To support the sturdy bone structure, a strong ligament connecting the shoulder joint to the wrist helps in preventing the wing from overstretching. Even in a fully extended position, the elbow joint always retains some bent.



The mobility birds lose through the structure of the wing they usually regain in the more proximal part of the body. Their shoulders are hypermobile compared to our shoulder joints (imagine being able to clap your hands behind your back while the arm is fully extended). Most of the capacity that birds

have to change the shape of the wing and control dynamic flight comes from the folding and unfolding of the wing itself and the greater range of motion possible at the level of the shoulders. In short, the joints of the elbow and wrist can fold up but not rotate much, most of the rotation of the wing comes from the shoulder.

Read the complete essay and watch many interesting videos at:

<https://www.animatornotebook.com/learn/bird-flight>

2025 Propbusters Electric Fun Fly & Swap Meet

Photo credits: Jim Holzworth



Great Day for Flying!





There were the slow and steady aircraft, and then there were the get-up-and-go aircraft!



Ray Gilbert and Ed Deming with their Corsairs.



Corsairs in action!



Twin-engine (electric motor) flying.



Shane Duffy serving burgers and hot dogs.



Steve Pickering taking off his high wing.

Tips & Tricks

Easy Control Surface Alignment

When you install and adjust your pushrods, it is better and easier to do if you lock your control surfaces in their neutral positions. Use a pair of coffee mixing sticks and a couple of clamping clothespins to keep the surfaces from moving.



Handy Clamp



There are a hundred tasks in modeling during which you simply need a third hand. Soldering connectors to wire leads is a good example. In a pinch, you can use a pair of pliers with its handles wrapped with a rubber band. The pliers are heavy enough to act as a steady base and the rubber band provides enough clamping force to hold delicate items without damaging them

<https://www.modelairplanenews.com/10-field-bench-tips/>

Model of the Month

No Model of the Month for July 2025.

Minutes of the July 15th 2025 RC Propbusters Meeting

Meeting minutes will be available with a password on the RC Propbusters website.

In the menu of our www.rcpropbusters.com website look for: “**Our Club => Meeting Minutes**”.

The password is the same number as the one for the gate lock at our flying field.
